

## Original Paper

# The Relationship between Resilience and Mental Health: the Mediating Effect of Positive Emotions

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### Abstract

*To investigate the relationship of resilience, positive emotions and mental health, and the relationship of resilience, positive emotion and three sub-dimensions of mental health: self-affirmation, depression and anxiety. In this study, the existing cross-sectional data, select the Beijing Forestry University data as samples. In this study, questionnaire survey a random sample of 199 undergraduate students of Beijing Forestry University, they uniform application three Scale Surveying, PANAS, CD-RISC, GHQ-20. According from the study, (1) resilience, positive mood and general health are related where resilience and positive emotions between the resilience. General psychological health, positive emotions and general mental health, it is positively correlated. (2) Resilience and self-affirmation exists, positive correlation with depression and anxiety, respectively negative correlation. Between positive emotions and self-affirmation the positive correlation with anxiety negative correlation. (3) Part mediating effect of positive emotions exist between resilience and self-affirmation, resilience can be made to self-affirmation prediction coefficient from 0.042 down to 0.036. Therefore, this study concluded that resilience undergraduates can have an impact on mental health through the intermediary variable positive emotions.*

### Keywords

*Resilience, positive emotions, mental health, mediating effect*

## 1. Introduction

Since the 21st century, a large number of talents have been needed to increase the strength in all aspects of Chinese construction, with the rapid development of China's economy, society, science and technology, education and other fields, Chinese government vigorously promotes the implementation of the equal education, making the university education more and more popular. The number of college graduates have changed from over one million in 2001 to eight million in 2015 and increase about 6.5 times in 15 year (Shi, Cui, Lei, & Zheng, 2013). On the one hand, it reflects the increasing popularity of education in recent years. On the other hand, the number that warns us because of the rapid growth of the population, undergraduates face more pressure problems such as employment, postgraduate, emotion, and thus more prone to physical and mental health problems. Mental health is the basic elements of the value of life to finish your college course and get into the society. Measuring, building and understanding the undergraduates' psychological health level and establishing effective mechanism to cultivate and improve undergraduates' mental health score helps the students complete their studies and achieves a better life. Resilience refers to the individuals to relieve the stress that do harm to mental health and adapt to the bad environment in the face of pressure. Individual resilience ability is stronger in the face of pressure resistance to pressure, it is significantly negative correlation with the occurrence of negative emotions, has significant positive correlation relationship with emotions like optimistic, sunshine (Davydov et al., 2010). Most scholars have carried out on the pressure and the relationship between undergraduates' mental health, but most studies focused on the stress and negative emotions, the results showed that when in the pressure environment, at the same time to have a moderate positive emotions and negative emotions, will help make the interpersonal communication level of personal development, help people to adapt to the environment better (Fredrickson, 2001).

Therefore, it is an important link to study how positive emotions influence people's mental health and improve their mental health. This study explores the relationship among the resilience, positive emotions, mental health and hypothesize that positive emotions through the mediating effect respectively in psychological resilience and psychological health and its' dimensions have relationship between self-esteem, depression, anxiety.

## 2. Background and Hypotheses

In recent years, fresh or not has a bachelor's degree in this year's undergraduates has become a mainstay of annual recruitment market, increasing employment pressure of competition. They are the main power in the future of the construction of China and will become the main power in the future of the construction of all walks of life. Students with high resilience tend to be able to face the pressure actively. They are generally good at academic performance and do things in a positive way and can finish their study tasks well. It's no doubt that action between resilience and mental health (Meerow, Newell, & Stults, 2016), but how the resilience to influence mental health still to be further studied.

### 2.1 Resilience

Nearly 20 years, the researchers have emphasized particularly on the concept of resilience in different parts, there are three main categories: First, the definition of consequence is standing in the perspective of development results to define resilience. Masten points out that resilience is that when a person faces a major threat to the event can quickly adapt and generate smooth development results. Second, the definition of competence is that the intelligence and quality that a person exhibit is an individual trait. Werner E.E proposed that resilience is the ability of individuals to withstand highly destructive changes and try to cover up bad behaviors (Ma, Sang, & Hong, 2008). Third, the definition of procedure is that resilience is a process of constant change, growth and expansion. Resilience represents a series of abilities that enable individuals to recover quickly and successfully respond to difficult pressures and threats through dynamic interaction. All in all, the definition of procedure includes the definition of consequence and the definition of competence, because it will not only define the focus of the individual good adaptability and strain capacity and also dynamic relationship between risk and protective characteristics to identify in case of more easily accepted by people. In general, all studies on resilience contain two factors of operational definitions of resilience: (1) individuals encounter adversity; (2) individuals successfully response (Fredrickson & Levenson, 1998).

Although the researchers have not given the resilience a scientific definition, different researchers for the inner structure of resilience of is different, but in the study of science, generally regarding the role of resilience as the specific protective factors from the operational level. After years of research by foreign researchers, at present a more consistent conclusion is that the individual in the process of the produce and development of resilience, the key mediating effects the internal and external “protective factors”. Protective factors are the factors that can buffer a child’s injury in a negative environment, which is opposite of risk factors. These protective factors come from external factors such as social support and individual traits such as self-efficacy. Masten and Coatsworth summarized the results of the previous 25 years, noting that similar protective factors were mentioned in many studies of resilience in the late twentieth century (Doll & Lyon, 1998).

### 2.2 Positive Emotions

In 1998, Martin. E. P. Sligman proposed a positive psychology movement, which divided the research of positive psychology into three aspects: the first is positive emotion; the second is the individuality characteristic of the positive individual; the third is the positive social system. Positive emotions mainly have two core functions. First, the instantaneous broaden function. That is to expand the individual’s thinking quickly-action threshold. The positive emotions help the individual to actively think more about the relevant possibility and expand the scope of the individual’s attention, cognition and action. For example, the emergence of new stimuli makes individuals increase the attention to the stimulus and develop a deep exploration of the movement trend. Second, it can help individuals construct lasting physical, mental, psychological, and social resources. For example, when individuals experience a pleasant mood, they will have more inclination to go out to parties, make friends, and

share pleasant behaviors with their partners. In the study of children's positive emotion found that pleasurable games can help children establish intellectual framework and promote children's brain development which help children master the ability of obtaining information and improve children's ability to solve high difficulty when they grow up. These two functions can promote the individual to continuously improve themselves and attain the well-being of the body. Integrated predecessors' research on positive emotions, it is not difficult to found that positive emotions can not only increase attention threshold, but also improve the sensitivity of the individual for positive reality and reduce the negative emotions that leading to emotional experience and physical arousal and make the individual's mental and physiological continue in a peace and stability state (Gloria & Steinhardt, 2016).

Apart from the above function, in recent years researchers have proposed that positive emotions also have alleviate release function, this function can be expressed from two aspects: First, the negative emotion get activated that can repair by autonomic nerve calm (Catalino & Fredrickson, 2011). For example, when people anger, the phenomenon such as his heart speeds up, adrenal hormone secretion and blood pressure increases, positive emotions can help the body quiet and ease anger. Second, positive emotions can repair the agile thinking after the individual feels the subjective negative emotion. For example, in solving complex problems, positive emotions can help individuals explore new thinking paths and create the ability to solve new problems (Kobau et al., 2011).

The negative influence of stress on undergraduates' mental health has been supported by many researches. Previous studies have focused on the generation and change of negative emotions in the face of stress. With the rise of positive psychology, more and more researchers have begun to pay attention to the evolution of positive emotions under stress in recent years. Studies have shown that in the stress environment, if the individual is able to maintain the balance of positive emotions and negative emotions, namely while maintaining the balance of their own state of positive emotions and negative emotional inside body will help improve the flexibility of individual interpersonal interaction and make it easier for individuals to adapt to the environment and produce stable, healthy state of mind (Davydov et al., 2010). Positive emotions can indirectly affect people's current mental health level by influencing people's expectations of the results of stress.

### *2.3 Mental Health*

The end of last century, the world's most authoritative WHO (the World Health Organization) gives the new definition about health, they think that "health is not only the body without the disease, but also in spirit and social life reached a state of perfect" (Wang, Lu, Du, & Wang, 2011). So in judging whether a person conforms to the health of the standard, should be from two points of view: physiological and psychological measurement, only both reached the standard of health and individuals can carry on the good social adaptation in social life, to create a rich social value of "positive energy", only the individual can be defined as healthy.

Maslow points out that if a person wants to achieve self-realization, he should maximize his potential value and need to achieve mental health. McKinney points out that mental health should be able to feel

happiness, with positive willingness and motivation, ability to quickly adapt to society, unity and harmony ability, realize self-ideal this five aspects as a psychologist with rich clinical experience (Xiang & Bai, 2010). While Americans Johoda defined mental health as self-cognition, self-growth and unified stable personality, self-regulation ability, perception of reality and ability to change the environment and so on. Unify the scholars about the definition of mental health, it is easy to conclude that have the mental health of the individual must need to have three characteristics: keep the peace of mind, rich inner experience and good social adaptation ability (Xiang & Bai, 2010).

Through the study of the comprehensive analysis of the literature, we found that there is a significant negative correlation among resilience as a kind of pressure rebound strength and undergraduates' negative emotions and physical symptoms, a significant positive correlation among resilience and optimism, positive emotions. High resilience of students tend to actively cope with stress, be good in the whole academic situation, have an optimistic upward state in life, show actively adapt to the state in social life (Hammond, 2004). It's no doubt that resilience has the positive effect on mental health (Fredrickson, Tugade, Waugh, & Larkin, 2003), but the mechanism of action between resilience and mental health that is how the resilience to influence mental health still to be further studied.

By reading a large number of literature review, we analyze and integrate, make rational inference, and determine independent variables and dependent variables. The research tools were developed and measured, and the theoretical hypotheses were confirmed by quantitative. We determine the theoretical hypothesis, the measured independent variable and the dependent variable.

H1: Resilience influences general health scores through the mediating effect of positive emotions.

### **3. Method**

#### *3.1 The Participants*

This study used the existing cross-sectional data and selected students from Beijing Forestry University as samples for analysis. The data in the form of random sampling of Beijing Forestry University freshman to junior students in measurement, questionnaire 220, leakage through the selected a project too much, the selected answers for regular answer, reverse score and positive scoring title, did not answer according to requirements of the instructions, contradiction between check title, 21 questionnaires eliminate invalid. In the end, 199 copies of valid questionnaires were recovered, and the recovery rate was 90.45%, which met the statistical requirements. The descriptive statistical analysis results of the gender, grade and age of the sample are shown in Table 1.

**Table 1. Descriptive Statistical Analysis Results of Samples**

	Grade			Gender	
	Freshman	Sophomore	Junior	Male	Female
Age	17(1)	0	1	0	1
	18(11)	7	4	0	3
	19(67)	39	26	1	7
	20(69)	12	34	20	4
	21(39)	2	28	8	3
	22(10)	1	5	3	1
	23(1)	0	0	1	1
	24(1)	0	0	1	1
	24(1)	0	0	1	0
Total	199	61	98	34	20
				179	

### 3.2 Measuring Tools

This study using the mix of maturity scale questionnaire of “resilience scale, CD-RISC”, “positive and negative emotions scale, PANAS”, “the general health questionnaire GHQ-20” as the research tools.

#### 3.2.1 Resilience Scale (CD-RISC)

The scale developed by Kathryn M. Connor and Jonathan R. T. Avison is a self-test scale of 25 projects to test the mental resilience of the participants. The scale consists of two dimensions: resilience, self-confidence and self-efficacy, 0 represents “never”, and 5 represents “always”. Jin Qin in the Chinese undergraduates’ resilience about this scale test the reliability and validity. According to the results, alpha is 0.891, has a good stability and internal consistency coefficient with the significant level (Li & Wei, 2007). Among them, the resilience and confidence component reliability was 0.887, and the reliability of self-efficacy was 0.741. The scale was validated by validity criterion validity and the life satisfaction index A (LSIA) was the criterion with significant positive correlation between them. Therefore, the scale has good criterion validity.

#### 3.2.2 Positive Emotion and Negative Emotion Scale (PANAS)

Subjective well-being is an overall evaluation according to their own standard of their life satisfaction levels. Watson compiled by positive emotions, negative emotions scale is used to determine the commonly used subjective well-being scale, divided into two dimensions: positive emotions and negative emotions, using 5 point method, almost no = 1 point, very much = 5 point (Nezlek & Kuppens, 2008). Zhang Weidong using exploratory factor analysis, verified the scale of the positive emotions subscales (PA) and negative emotions subscales (PN) two points dimensions have consistency across different cultures, Chinese and English scale the cumulated variance contribution ratio of the two factors were 51.31% and 44.25% respectively, closing to Watson’s results. However, the results of the study also show the problem of measurement deviation. Therefore, the composition of the measurement items in the PA component of the Chinese scale is not equivalent to the original scale

(Zhang, Diao, & Schick, 2004). In this study, the total score of the positive emotion scale in the PANAS scale was only included in the experimental analysis.

### 3.2.3 General Health Questionnaire GHQ-20

There are 20 questions in the GHQ-20 scale of general health questionnaire, all of which are “whether or not”, and the subjects need to express their feelings in the last few weeks with “yes” and “no”. In addition to the seventh and the tenth, the other subjects are all forward scoring, namely choose “yes” counts one point and choose no counts zero points. The first to ninth of the scale is self-affirmation scale, which measures the positive aspects of mental health, and the higher the score, the higher the self-affirmation. The first 10 to 15 questions is depression scale, 16 to 20 questions is anxiety scale, the scale is to measure the negative direction of the mental health, score level on behalf of the participants in terms of depression, anxiety level. Li Yan tested alpha, the result for 0.3695, self-esteem, depression, anxiety, three subscales alpha were 0.6016, 0.5901, 0.6972, each component of the acceptable internal consistency. The retest reliability of each component was 0.494 of self-affirmation scale, 0.642 of depression scale and 0.55 of anxiety scale, all of which had good stability. Structural validity was 0.78, and the Bartley Ball test was 1020.73, with good structural validity. The SCL-90 score was used as the criterion to test the criterion validity, and it had a good criterion validity (Qiu, Zheng, & Wang, 2008).

## 4. Results

This study first by SPSS17.0 to analysis descriptive statistical of samples, and then respectively using SPSS17.0 and AMOS17.0 for sample test, reliability and validity of the last using the SPSS17.0 to variables, correlation analysis and the mediation effect inspection to verify whether a hypothesis is put forward.

### 4.1 Reliability

Reliability is a kind of said scale measure of consistency, stability. Reliability coefficient in the process of project analysis can be used as the test of homogeneity index, this study determine the reliability coefficient of the new scale by testing Cronbach's Alpha coefficient (see Table 2).

**Table 2. Internal Consistency Reliability of Each Scale**

scale	sample	The number of items	Cronbach's Alpha	subscales	The number of items	Cronbach's Alpha
Resilience	n = 199	25	0.905			
Positive emotions	n = 199	25	0.799	Positive emotions	10	0.842
				Negative emotions	10	0.829
				self-affirmation	9	0.702
General health	n = 199	20	0.578	depression	6	0.500
				anxiety	5	0.479

The results showed that the coefficient of resilience and positive emotion was higher than 0.700, 0.905 and 0.799 respectively, and the reliability of each subscales was higher than 0.60. Therefore, the scale reliability used in this study was better. Generally, the reliability of the general health scale is lower, but the scales of the depression and the anxiety components all meet the threshold requirement. According to the overall statistical results of the project, the potential characteristics of b2, b20, g1, g3, g8, g9, g10 and the remaining items of the scale were not high enough, so these topics were deleted.

#### 4.2 Validity

Validity is used to test whether the measurement tools can be obtained in real situations. In statistics, the effective validity are the test marked with relevance validity, construct validity, internal validity and external validity. In social science research, construct validity is very important validity index, it can not only reflect the correlation of each observation model under the same measurement variables, but also be able to response the correlation of each observation indexes under different observed variables. The study of the theoretical framework based on the previous theories, adopt the existing scale revision. Therefore, this study will be sent by confirmatory factor analysis, testing the construct validity of scale (see Table 3).

**Table 3. Confirmatory Factor Analysis of Positive Emotion, Resilience and General Health**

Scale	$\chi^2$	df	$\chi^2/df$	TLI	NFI	CFI	IFI	GFI	RMSEA
Resilience	645.183**	231	1.793	0.764	0.802	0.844	0.900	0.902	0.059
Positive emotion	275.302*	171	1.629	0.790	0.803	0.897	0.902	0.919	0.053
General health	566.546*	168	3.372	0.432	0.424	0.498	0.521	0.829	0.065

According to the SEM whole model adaptation degree evaluation model and evaluation index of  $\chi^2$  value significant probability  $p < 0.05$ ,  $\chi^2/df \leq 5$ , TLI value (non standard fitting index), IFI value (value fitting index), CFI (comparability fitting index) values were greater than 0.90 above, such as fitting is good, more than 0.7 represents reasonable. The value of RMESA (approximate error root-mean-square) is less than 0.05, and the fitting degree is good, less than 0.08 represents reasonable. In the present study, the value of the chi squared value of the resilience scale was significant  $p < 0.05$ , and the value of the  $\chi^2/df$  was 1.793, the CFI was 0.844, the IFI was 0.900, and the RMESA value was 0.059, which was consistent with the fitting test. Therefore, the structure validity of the resilience scale was good. In the positive emotion scale, there was a significant difference in the value of the  $\chi^2$  value in the positive emotion scale ( $p < 0.05$ ), and the value of the  $\chi^2/df$  was 1.629, the CFI was 0.897, the IFI was 0.902, and the RMESA value was 0.053, which was consistent with the fitting test. Therefore, the structure validity of the positive emotion scale was good. General health scale  $\chi^2$  value significance ( $p < 0.05$ ,  $\chi^2/df$  was 3.372, CFI is 0.498, IFI was 0.521, GFI value of 0.829, RMESA value of 0.065, the fitting degree is low, but in the acceptable range, it can be assumed that the structure of general health



scale validity is validated.

#### 4.3 Correlation Study of Resilience, Positive Emotion, Mental Health Score and Self-Affirmation, Depression and Anxiety Component of Undergraduates

**Table 4. Correlation Matrix Diagrams**

	Resilience	Positive emotions	General health	Self-affirmation	Depression	Anxiety
Resilience	1					
Positive emotions	0.407*	1				
General health	0.324**	0.200**	1			
Self-affirmation	0.226**	0.189**	0.590**	1		
depression	-0.262**	-0.104	-0.594**	0.079	1	
anxiety	-0.280**	-0.202***	-0.722**	-0.119	0.534**	1

Note. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Correlation analysis results show that there is relationship among the resilience positive emotions, and general health, i resilience and positive emotions ( $r = 0.407$ ,  $p < 0.05$ ), resilience and general mental health ( $r = 0.324$ ,  $p < 0.01$ ), positive emotions and general mental health ( $r = 0.200$ ,  $p < 0.01$ ), there were positive correlation. Resilience, positive emotions and general health dimension correlation analysis results show that there is positive correlation between resilience and self-esteem ( $r = 0.226$ ,  $p < 0.01$ ) negative relationship among resilience, depression and anxiety ( $r = 0.262$ ,  $p < 0.01$ ), ( $r = 0.280$ ,  $p < 0.01$ ). There is a positive correlation between positive emotion and self-affirmation ( $r = 0.189$ ,  $p < 0.01$ ), a negatively correlation between positive emotion and anxiety ( $r = -0.202$ ,  $p < 0.001$ ). Results showed no significant correlation between positive emotions and depression which not tally with the expectations, the possible reason is that this scale cannot fully assess depression this trait contain all the features, in other words, the representation of the subscales are not able to accurately depression this concept.

#### 4.4 Internal Mechanism Test of Resilience and Mental Health—The Mediating Effect of Positive Emotion

##### 4.4.1 Mediating Effect of Positive Emotions between Resilience and Mental Health (H1)

This study resilience as the independent variable (X), general health as the dependent variable (Y), the positive emotions as intermediary variables (M) the inspection method for intermediary effect of regression coefficient in turn (see Table 5).

**Table 5. Positive Emotions in Resilience and General Health Mediating Effect test**

Variable	Equation 1: General Health		Equation 2: Positive Emotion		Equation 3: General Health		
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 3
Gender	0.298	0.952	-1.868	-1.427	0.298	0.298	0.999
Grade	-0.152	-0.118	1.750	1.951	-0.152	-0.152	-0.191
Resilience		6.309***		5.998***		6.309***	5.560***
Positive Emotions							0.530
<i>F</i>	0.057	13.315***	3.341*	14.631***	0.057	0.057	10.018***
<i>R</i>	0.024	0.418	0.184	0.434	0.024	0.024	0.419
$\Delta R^2$	-0.010	0.161	0.024	0.176	-0.010	-0.010	0.158

This inspection according to the intermediary effect model:  $X \xrightarrow{c} Y \leftarrow e_1$ ,  $X \xrightarrow{a} M \leftarrow e_2$ ,  $X \xrightarrow{c'} Y \leftarrow e_3$ ,  $M \xrightarrow{b} Y$ , first test to detect coefficient c, beta testing results of = 0.122 ( $t = 6.309^{***}$ ) test results significantly, the next in turn coefficient a and b on the test, test results a beta = 0.181 ( $t = 5.998^{***}$ ) test results significantly, b test results was not significant so need Sobel inspection, the inspection results of Sobel value is less than 0.97. The results show that positive emotion scores in resilience intermediary effect between general health score and total score was not significant. The H1 hypothesis doesn't work.

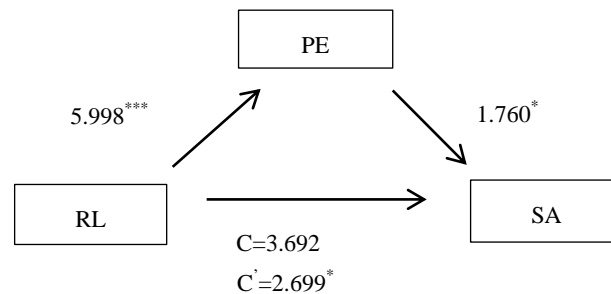
#### 4.4.2 Mediating Effect of Positive Emotion between Resilience and Self-Affirmation

**Table 6. The Mediating Effect of Positive Emotion in Resilience and Self-Affirmation**

Variable	Equation 1: Self-affirmation		Equation 2: Positive emotion		Equation 3: Self-affirmation		
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 3
Gender	1.053	1.449	-1.868	-1.427	1.053	1.449	1.631
Grade	-0.095	-0.069	1.750	1.951	-0.095	-0.069	-0.316
Resilience		3.692***		5.998***		3.692***	2.699**
Positive Emotions							1.760*
<i>F</i>	0.561	4.942*	3.341*	14.631***	0.561	4.942*	4.522*
<i>R</i>	0.077	0.270	0.184	0.434	0.077	0.270	0.296
$\Delta R^2$	-0.005	0.058	0.024	0.176	-0.005	0.058	0.088

Test model according to the intermediary effect: first test to detect coefficient c, beta testing results of = 0.036 ( $t = 3.692^{***}$ ) test results significantly, the next in turn coefficient a and b on the test, test results a beta = 0.181 ( $t = 5.998^{***}$ ) test result significantly s, the beta testing results of b = 0.036 ( $t = 1.845^*$ ), c

test results of the  $\beta = 0.011$  ( $t = 2.651^{**}$ ), the results show that positive emotion scores in resilience total and partial mediation effect between self-affirmation scores (see Figure 1).



**Figure 1. The Mediating Effect of Positive Emotion in Resilience and Self-Affirmation**

Note. PE = Positive emotions, RL = Resilience, SA = Self-affirmation.

## 5. Discussion

### 5.1 Correlation between Resilience and Mental Health (Self-Affirmation, Depression, Anxiety) among Undergraduates

In this study, we found that resilience has a positive correlation between positive emotion and self-affirmation, and has negative correlation with depression and anxiety. The results of this study are the same as that of the famous psychologist Fredrickson. In his research, have seen 911 terrorist strikes the resilience and the terrorist events for all the citizens of New York City after the positive emotion experience and the rise of positive correlation between self-esteem and negative correlation between anxiety, depression (Wen, Hou, & Zhang, 2005). In this study, undergraduates with a higher resilience for the life of all kinds of events will occur through self-affirmation, positive self-talk and optimistic attitude towards life to solve problem, they tend to use humor, flexible thinking, emptying technology such as body and mind to trigger positive emotions, thus to reduce all kinds of stressful events in life causing consequences to health of body and mind, to reduce depression, anxiety and so on in a life of confusion, have higher self-esteem, and that the generally high scores of mental health in general. This kind of students urge themselves in academic, career, life more flexibility by positive emotions, and give all kinds of accident more flexible solutions, settled with negative emotions, the adverse physiological and psychological reaction of the resistance, has good adaptability to society, to make full use of social resources, self-esteem awareness in the social activities, to raise their well-being, to create greater wealth for the society.

### 5.2 The Internal Mechanism of Resilience and Mental Health—The Mediating Effect of Positive Emotions

Through data analysis, this study found that the resilience and positive emotions of the contemporary university students, to cope with the negative events, to avoid depression, anxiety has certain improvement effect. Which through the intermediary effect analysis and verification results show that

the resilience can directly affect the self-esteem of undergraduates score, and through the positive emotions have indirect influence on it.

Resilience have a direct effect on the mental health of the people the reason might be, according to analysis of resilience “adjusting the model”, in contemporary society, with strong science and technology of informatization, digital technology, under the influence of individual in all aspects of development for undergraduates. The cultivation of comprehensive quality will bring higher requirements, the effect of the social stress, universality, it is easier to make the undergraduates’ depression and anxiety on mental health damaging tremendous psychological problems, resilience higher undergraduates, however can solve a stress events, revealed by their perseverance, self-improvement, optimistic good psychological traits, such as to reduce the complex of unhealthy influence brought by the pressure source and, in turn, can reduce depression, anxiety, enhance the confidence of the stressful events, solve a more healthy psychological environment.

Resilience mediation effect on people’s self-esteem may according to the positive emotion is the cause of “broadening-building model” theory proposed by the positive emotions can increase the threshold of attention and thinking, thus people can get through the wider evaluation model, to evaluate themselves from multiple azimuth, individuals can choose from several aspects as conducive to personal growth, complete self evaluation, achieve the goal of aspect and self-esteem scores increased accordingly.

This study positive emotions in the mediation between the resilience and general mental health effect was not significant, the possible reason is that this study choose the sex ratio of the sample, the boy was too less, but in real life, boys to girls less, facing the social restraint they can often through sports, video games and so on multi-channel outlet to link the pain of pressure, have a higher positive emotion (Chiu et al., 2006). This study also found that positive emotions in resilience and intermediary effect between depression and anxiety were not significant, Clark and Watson et al. Studies show that on the one hand, anxiety must belong to a relatively lower level characteristics of positive emotions and depression does not necessarily belong to this feature (Beblo et al., 2012); On the other hand, according to the theory of cognitive behavior therapy, we believe that the depression is likely due to the unreasonable thinking of reasons (Hamilton, Kitzman, & Guyotte, 2006). In this study, in response to this on the one hand, the effect of cognitive evaluation may be strict in depression itself, so in the future research should further discussions on this issue.

Through the analysis of the study this time, we discuss the influence of the resilience to general mental health, on the one hand we can not ignore the impact of positive emotions, needs the ascension of the undergraduates’ self-efficacy, positive emotions to develop in-depth education effect. At the same time, positive emotions generated by partial intermediary effect to remind us that positive emotions are certainly influenced (Chen, 2017), but the influence of ability is limited, so can’t simply positive emotions through ascension to improve undergraduates to cope with stress, enhance self-confidence, keep the stability of the mental health problems. So, if you want to further improve the mental health level of undergraduates, we should continue to broaden the exploring study of other related factors

affecting the students mental health, and in view of the different psychological health promotion of individual differences, thus all-round multi-angle promote the overall level of the mental health of undergraduates.

## 6. Conclusion

University is the cradle of talent training, focus on undergraduates' mental health problems, from the source of our social economy, science and technology, national defense, education, and other areas of the more rapid and efficient development lay a solid foundation. This research through the questionnaire distribution and recovery of statistical methods of Beijing forestry undergraduates' mental health status of statistical analysis to the following conclusion: there is a relationship among resilience, positive emotions, general health, there was a positive correlation between resilience and the positive emotion between psychological resilience and psychological health, between positive emotion and psychological health. Resilience, positive emotions and general health dimension of the correlation analysis results show that the positive relationship between resilience and self-esteem, and negative correlation between depression and anxiety, respectively. There is a positive correlation between positive emotion and self-affirmation, and there is a negative correlation with anxiety. The positive emotion has some mediating effect between resilience and self-affirmation, which can reduce the prediction coefficient of psychological resilience from 0.042 to 0.036.

Therefore, we are to discuss the influence of the resilience to general mental health, on the one hand, we can not ignore the impact of positive emotions, need the ascension of the undergraduates' self-efficacy and positive emotions to develop further education, and partial mediation effect produced by positive emotions reminds us that positive emotions is to influence, but the influence of ability is limited, so can't simply positive emotions through ascension to improve undergraduates to cope with stress, enhance self-confidence, keep a stable psychological health problems. As a researcher, we should further explore the factors that influence the psychological health of undergraduates, and set up an effective psychological health education course to improve the mental health of undergraduates.

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